

AMENDMENTS TO THE CLAIMS

Claims 1-22 (cancelled)

23. (new) A transgenic plant cell wherein said plant cell is genetically modified by transformation or transfection with a nucleic acid molecule that encodes a plant expansin polypeptide comprising an amino acid sequence motif ASSISGGG.

24. (new) The transgenic plant cell according to Claim 23, wherein the nucleic acid molecule encodes an amino acid sequence selected from the group consisting of SEQ ID NOs: 2, 4, and 6.

25. (new) The transgenic plant cell according to Claim 24, wherein the nucleic acid molecule comprises a sequence selected from the group consisting of SEQ ID NOs: 1, 3 and 5.

26. (new) The transgenic plant cell according to Claim 25, wherein the nucleic acid molecule consists of a sequence selected from the group consisting of SEQ ID NOs: 1, 3 and 5.

27. (new) The transgenic plant cell according to Claim 23, wherein the nucleic acid molecule remains hybridized under a washing condition of 0.1x SSC, 0.1% SDS at 60°C with a nucleic acid molecule consisting of a sequence selected from the group consisting of SEQ ID NOs: 1, 3 and 5.

28. (new) The transgenic plant cell according to Claim 23, wherein the cell over-expresses the nucleic acid molecule.

29. (new) A cell according to any of Claims 28, wherein said nucleic acid molecule is over-expressed at least 2-fold when compared to basal level expression.

30. (new) A cell according to any of Claims 28, wherein said cell over-expresses said nucleic acid molecule at least 100-fold.

31. (new) The transgenic plant cell according to Claim 23, wherein the nucleic acid molecule encodes a polypeptide that is at least 90% identical to an amino acid sequence selected from the group consisting of SEQ ID NOs: 2, 4, and 6.

32. (new) The transgenic plant cell according to Claim 31, wherein the nucleic acid molecule encodes a polypeptide that is at least 99% identical to an amino acid sequence selected from the group consisting of SEQ ID NOs: 2, 4, and 6.

33. (new) The transgenic plant cell according to Claim 23, wherein the nucleic acid molecule is isolated from the genome of a resurrection plant.

34. (new) The transgenic plant cell according to Claim 33, wherein the resurrection plant is a *Craterostigma sp.*

35. (new) A plant comprising a cell according to Claim 23.

36. (new) A product comprising a plant cell or plant tissue derived from a plant according to Claim 35.

37. (new) A product according to Claim 33 wherein said product is a food stuff, or paper.

38. (new) A method for altering mechanical properties of a plant cell wall, the method comprising the steps of:

i) providing a plant cell according to Claim 23, and

- ii) cultivating from said cell a plant.

39. (new) A method for preparing a cell wall extract wherein said cell wall has altered mechanical properties, the method comprising the steps of:

- i) providing a plant according to Claim 38; and
- ii) preparing a cell wall extract from said plant.

40. (new) A cell wall extract prepared by the method according to Claim 39.

41. (new) An isolated polypeptide having an amino acid sequence selected from the group consisting of SEQ ID NOs: 2, 4, and 6.

42. (new) A method for the rehydration of dehydrated plant material, the method comprising applying a composition comprising a polypeptide according to Claim 41.

43. (new) An isolated polynucleotide molecule which encodes a polypeptide having an amino acid sequence selected from the group consisting of SEQ ID NOs: 2, 4, and 6.

44. (new) The isolated polynucleotide molecule according to Claim 43, wherein the polynucleotide comprises a nucleotide sequence of SEQ ID NO: 1, 3, or 5.